

Andrea's Case: Genes, Gestation, or Nurturing

It was about sixteen years ago at the University's fertility center that Amy and Allan met Betty and Bob. Both couples wanted children, and when both Amy and Betty became pregnant at about the same time, the couples went through the prenatal classes together in the joyful anticipation of parenthood. Andrea and Brenda were born about six weeks apart at University Hospital.

Afterward the lives of the new families took different paths. Amy and Allan moved away when Allan's company transferred him. Three years later a tragic accident left Amy a widow. Amy moved in with her mother, who helped raise little Andrea, often being the primary caretaker for months and years at a time while Amy struggled to get her life back together. Last year Amy remarried and her new husband began the legal process of adopting Andrea. Amy and her husband have bought a new home near University Hospital and, according to current plans, as soon as the school year is over the family, including Grandmother is going to move back there.

Betty and Bob wanted more children after Brenda was born, but were unable to have any. Betty's fertilized eggs simply would not yield a pregnancy in her and the couple was uncomfortable with the idea of using a surrogate mother. Over the years, Brenda, who like Andrea, is now fifteen, often talked about wanting a sister. This added to the sense of loss felt by Betty and Bob. But it was not until the scandal broke that their sense of loss turned into worry, then anger and outrage.

A few months ago the public learned that unscrupulous physicians at the University fertility clinic had taken the fertilized eggs from some couples and implanted them in other women without anyone's knowledge, consent, or approval. Betty and Bob joined scores of other couples in a class action suit through which they were able to unseal clinic records. The records show that Betty's and Bob's fertilized eggs were used to impregnate one other woman. Andrea is the sister Brenda always wanted. The University has informed Amy that Betty and Bob are Andrea's genetic parents.

The question now is how to resolve this matter in the most ethical and fair-minded way possible. The arbitrator wishes to take into consideration the interests of all concerned, and the arbitrator also is aware that its decision may set important ethical, if not legal, precedents. You have been called by the arbitrator to guide the deliberations through reason and sound judgment. Your advice, and the principles upon which it is based, are key. You are to (1) define the issues, (2) identify the stakeholders, (3) identify a range of reasonable options, (4) clarify applicable principles and criteria for establishing priorities among the options, and (5) make specific recommendations. In at every stage, give reasons.

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Investigative Proposal

Imagine you are a scientist in the Office of the Surgeon General. The grant that funds your current research is about to expire, and you would like to tackle a new research area. The following Request for Proposals ("RFP") has come to your attention.

Request for Proposals to Investigate "Gulf War Syndrome"

In 1990 and 1991 approximately 800,000 troops, primarily American, served in Kuwait, Saudi Arabia, and part of Iraq during the 'Gulf War.' A small percentage of those who served in the Gulf area reported various illnesses after returning to the United States. Most of the ill persons examined proved to have known diseases, but some had symptoms not attributable to any known disease. This group of symptoms came to be known as "Gulf War Syndrome."

During their stay in the Gulf, many of these troops were exposed to debilitating natural environmental factors, including extreme heat and aridity, blowing sand, and disease organisms to which they had not been exposed. Additionally, many were given medications designed to counter insect bites, some of the local diseases, and nerve gases. Moreover, many were exposed for weeks or months to the thick smoke from the oil well fires set by the retreating Iraqis. This smoke contained, among other substances, harmful levels of lead. Lastly, some troops used or handled projectiles composed of spent uranium, and others may have been exposed to Iraqi nerve gases.

The ratio of men to women in the American forces was about 9 to 1. Some units were regular army, many from Fort Bragg, North Carolina, and Fort Campbell, Kentucky. Others were national guard units from local areas throughout the United States.

The National Academy of Sciences Institute of Medicine has recommended a coordinated search for the cause or causes of the 'Gulf War Syndrome.' The Department of Defense has agreed to provide substantial funding for a scientific investigation of the syndrome. Grant applicants must submit a two-page proposal outlining the steps they would take to identify the cause(s) of the syndrome. *This proposal should clearly indicate how your research plan would lead to an understanding of the cause(s) of the 'Gulf War Syndrome.'*

The problem of the Gulf War Syndrome is a natural extension of your current research, and you would like very much to receive a grant to conduct the investigation. Write a 2-page (typed, double-spaced) proposal that would put you in the final competition for funding. Keep in mind that as a research scientist, you are expected to write clear, grammatically correct English.

¹ Written by Professor John Mooring for A&S, Santa Clara University, Assessment Task Force Subgroup on the Natural Sciences, February, 1995. Administered by Professor Bill Murray in Bio 85, Human Health and Disease.